DEC STD 022-0 Cable and Harness Documentation: Part Identification Requirements

DOCUMENT IDENTIFIER: A-DS-EL00022-00-0000 Rev E1, 06-Mar-1990

ABSTRACT: This standard defines the part numbering system for cables and harnesses.

APPLICABILITY: Mandatory for Engineering, Engineering Services, and Manufacturing personnel who are responsible for the design, release, or assembly of cables and/or harness and their documentation.

STATUS: APPROVED 06-Mar-1990; use VTX SMC for current status.

This document is confidential and proprietary, and is the property of Digital Equipment Corporation. It is an unpublished work protected under the Federal copyright laws.

©Digital Equipment Corporation. 1990. All rights reserved.

DEC STD 022-0 Cable and Harness Documentation: Part Identification Requirements

DOCUMENT IDENTIFIER: A-DS-EL00022-00-0000 Rev E1, 06-Mar-1990

REVISION HISTORY:	Rev D,	18-Sep-1980	
	Rev E,	12-Jun-1986	ECO Number LJ004
	Rev E1,	06-Mar-1990	ECO Number CTS05
Document Management Category:	Cables and Harnesses (HPC)		
Responsible Department:	Comp Sys Mfg Eng & Tech, Proce		
Responsible Person:	Michael Brennan		

APPROVAL: This standard has been reviewed and recommended for approval by the General Review group for its category. Rev E1 incorporates clerical changes only.

Michael Brennan - Manufacturing Operations

Eric Williams - Standards Process Manager

Direct requests for further information to:

Michael Brennan
Use $ VTX ELF for the latest location information

Use VTX SMC to order copies of this document from Standards and Methods Control. Send distribution questions to JOKUR::SMC or call DTN: 234-4423.

CONTENTS

1 INTRODUCTION 1
1.1 PURPOSE 1
1.2 SCOPE 1
1.3 RESPONSIBILITIES 1
1.3.1 Digital Organizations 1
1.3.2 Chief Engineer's Office 1

2 PART IDENTIFIER - REQUIREMENTS 1
2.1 OPTION NUMBERS - CABLES 1
2.2 70-CLASS PART NUMBER - HARNESSES AND CABLES 1
2.3 RULES FOR CABLE LENGTH VARIATIONS 2
2.3.1 U.S. Customary Cable Lengths 2
2.3.2 Metric Cable Lengths 5
2.4 TOLERANCES 6
2.4.1 Standard Length Tolerances 6

Appendix A REFERENCED DOCUMENTS 13

A.1 EL-Class Digital Documents 13

TABLES

1 U.S. Customary Variation-Length-Tolerance References 2
2 Summary of U.S. Customary Cable Lengths 4
3 Metric Variation-Length-Tolerance References 5
4 U.S. Customary and Metric Cable Lengths and Tolerances 7

1 INTRODUCTION

1.1 PURPOSE

This section of the standard defines the numbering system used for cable and harness part identifiers.

1.2 SCOPE

This standard specifies how cables and harnesses are identified using the part numbering conventions described in *DEC STD 012-0 Part Identification Standard*. Application of these part numbers to cable and harness drawings provides all in-house organizations with a basis for identifying an element of a product or assembly by its part number. The rules for using the part variation to indicate cable length, in either U.S. customary or metric units, are also provided.

This standard does not apply to 17-class wire and cable assemblies.

1.3 RESPONSIBILITIES

1.3.1 Digital Organizations

Any Engineering, Engineering Services, or Manufacturing group responsible for the design, release, or assembly of cables and/or harnesses and their documentation must comply with the requirements of this standard.

1.3.2 Chief Engineer's Office

The assignment of cable part numbers is done by the Chief Engineer's Office and shall comply with the requirements stated under heading 2.

2 PART IDENTIFIER - REQUIREMENTS

All cable and harness part identifiers must be assigned in accordance with the requirements of DEC STD 012-0 and the conventions defined herein. Although not expanded on in the scope of this document, the revision field of the part identifier is to be used, and shall also follow the conventions established in DEC STD 012-0.

2.1 OPTION NUMBERS - CABLES

Cables that are intended to appear in the Master Price File (MPF) are assigned alphanumeric part numbers using a BCXXX-XX or BNXXX-XX scheme. These option numbers are assigned by the Chief Engineer's Office. The BC code indicates a U.S. customary length cable. The BN code represents a metric length cable. The length of these cables is identified by the 2-character part variation that follows the basic part number. See subhead 2.3 for identification and details.

2.2 70-CLASS PART NUMBER - HARNESSES AND CABLES

Harnesses usually do not appear in the MPF and are assigned a 70-class part number. This is used for both U.S. customary and metric length harnesses. Harnesses are never assigned BC or BN model numbers. However, some cables that are not usually sold to customers are also assigned 70-class numbers. See subhead 2.3 for harness length requirements.

2.3 RULES FOR CABLE LENGTH VARIATIONS

Cable lengths are determined by the 2-character part variation that follows the base number. This "length code" is always preceded by a dash that follows the base number. For example:

BC09A-XX.A1	Part Variation (feet, undefined length)
BN09A-YY.B3	Part Variation (meters, undefined length)

Variation identifiers represent the same numeric length value when used with either part or option numbers. Their actual lengths are not equal, however, in U.S. customary and metric units. Refer to Table 4 for a list of U.S. and metric part variations and their representative units.

Part variations and their U.S. and metric lengths are defined in subheads 2.3.1 and 2.3.2.

NOTE

Part variations in the part number are used to indicate wire length, and apply only to cables, not harnesses. Harness design precludes a prescribed wire length. Therefore, part variations are not used with harness part numbers. For part variations and how they represent cable length, refer to *DEC STD 022-1 Cable and Harness Documentation: Drawing Requirements for 70-Class and Option Numbers.*

2.3.1 U.S. Customary Cable Lengths

Cable BC08A-9M, for example, is an option number and 70-06000-9M is a 70-class part number; their U.S. lengths are the same, 9 feet, 11 inches, as shown in Table 1. Alphanumeric part variations and their equivalent lengths are assigned as described in Table 1.

Table 1: U.S. Customary Variation-Length-Tolerance References

Part Variation	Length (U.S. Customary)	Tolerance
0A to 0M See a.	1 inch to 11 inches	±0.5 inch
01 to 4M	1 foot to 4 feet, 11 inches	±1.0 inch
05 to 9M See b	5 feet to 9 feet, 11 inches	±2.0 inches
10 to 25	10 feet to 25 feet	±3.0 inches
26 to 99 See c.	26 feet to 99 feet	±2.0%
A0 to Z9 See d.	100 feet to 2190 feet	±2.0%
AA to AK	Not used in non-metric cables	
YA to YZ See e.	Special Lengths	

a. Cables 11 inches and less in length between connectors are identified by a zero preceding a letter. For this length, increments are in steps of 1 inch per letter.

   Example: 0E = 5 inches

b. Cables from 1 foot up to and including 9 feet, 11 inches in length between connectors are identified by a zero preceding a numeral or a numeral greater than zero preceding a letter. For this length, increments are in 1 foot steps for a numeral and 1 inch per letter.

   Example: 8C = 8 feet, 3 inches

c. Cables from 10 feet up to and including 99 feet in length between connectors are identified by numerals only. For this length, increments are in 1 foot steps. Only feet are used in this length.

   Example: 36 = 36 feet

d. Cables from 100 feet up to and including 2190 feet in length between connectors are identified by a letter preceding a numeral. For this length, increments are in steps of 10 feet. Only feet are used in this length.

   Example: B7 = 270 feet

e. In the U.S. customary system, "special length" cables that are not available in standard variations are identified by a 2-letter code starting with YA and continuing alphabetically.

   Examples:

   BC09A-YA = 3000 feet

   BC09A-YB = 11 feet, 5 inches
   or

   7006000-YA = 4170 feet

   7006000-YB = 10 feet, 4 inches

Refer to Table 2 for more U.S. customary variation-to-length, cross references.

Table 2: Summary of U.S. Customary Cable Lengths

Inches Only		Feet and Inches	
Length	Part Variation Identifier*	Length	Part Variation Identifier*
1 inch	0A	1 foot 0 inch	01
2 inches	0B	1 foot 1 inch	1A
3 inches	0C	1 foot 2 inches	1B
4 inches	0D	1 foot 3 inches	1C
5 inches	0E	1 foot 4 inches	1D
6 inches	0F	1 foot 5 inches	1E
7 inches	0H	1 foot 6 inches	1F
8 inches	0J	1 foot 7 inches	1H
9 inches	0K	1 foot 8 inches	1J
10 inches	0L	1 foot 9 inches	1K
11 inches	0M	1 foot 10 inches	1L
Maximum inch only		1 foot 11 inches	1M
		2 feet 0 inches	02
		Up to: 9 feet 11 inches	9M

* The letters G,I,O,Q and X shall not be used as part of the part variation, to conform to the conventions of DEC STD 012-0.

Feet Only		Hundreds and Tens of Feet	
Length (in Feet)	Part Variation Identifier	Length (in Feet)	Part Variation Identifier*
10	10	100	A0
11	11	110	A1
12	12	120	A2
13	13	130	A3
14	14	140	A4
15	15	150	A5
16	16	160	A6
17	17		
18	18		
19	19		
20	20	Up to: 2190	Z9
Up to:			
99	99		

* The letters G,I,O,Q and X shall not be used as part of the part variation, to conform to the conventions of DEC STD 012-0.

Refer to Table 4 for detailed U.S. and metric lengths and tolerances.

2.3.2 Metric Cable Lengths

Metric cable lengths are identified by the part variation and equivalent lengths, as described in Table 3 and the following subheads.

Table 3: Metric Variation-Length-Tolerance References

Part Variation	Length in Meters	Tolerance
AA to AK See a.	0.01 to 0.09	±2.0 mm
0A to 0K See b.	0.1 to 0.9	±16.0 mm
01 to 4K	1.0 to 4.9	±25 mm
05 to 9K See c.	5.0 to 9.9	±100 mm
10 to 99 See d.	10 to 99	±2.0%
A0 to Z9 See e.	100 to 2190	±2.0%
MA to MZ See f.	Special Lengths	–

Example: BN09A-9M

a. Cables from 10 mm to 90 mm in length between connectors are identified by a letter "A" followed by a letter. For this range of lengths, increments are in steps of 10 mm per letter.

   Example: AD = 40 mm

b. Cables from 100 mm to 0.9 meter in length between connectors are identified by a zero preceding a letter. For this range of lengths, increments are in steps of one-tenth meter per letter.

   Example: 0E = 0.5 meter

c. Cables from one meter up to and including 9.9 meters in length between connectors are identified by a zero preceding a numeral or a numeral greater than zero preceding a letter. For this range of lengths, increments are in steps of one meter for a numeral and one tenth meter for a letter.

   Example: 8C = 8.3 meters

d. Cables from 10 meters up to and including 99 meters in length between connectors are identified by numerals only. Increments for this range of lengths are in one meter steps.

   Example: 36 = 36 meters

e. Cables from 100 meters up to and including 2190 meters in length between connectors are identified by a letter preceding a numeral. Increments for this range of lengths are in steps of 10 meters.

   Example: B7 = 270 meters

f. In metric units, special cable lengths are identified by a part variation starting with MA and continuing alphabetically, changing the second letter only with the description.

Example:

70-06000-MA = 4170 meters 70-06000-MB = 10.5 meters BN09A-MA = 4.23 meters

See Table 4 for U.S. Customary and metric variations.

NOTE

The part variations listed in Table 4 represent their U.S. and metric equivalent in respective units. This is not a cross-reference or U.S./metric conversion table. It is intended only to define the variation by its representative unit, whichever system is employed. Metric or U.S. units are specified on the applicable engineering drawing(s).

2.4 TOLERANCES

2.4.1 Standard Length Tolerances

A standard length tolerance is defined to be the general acceptable tolerance for all manufacturers and all design engineers. Any other requirements must be defined on the drawing. Table 1 lists the U.S. customary acceptable tolerances. Table 3 lists the metric acceptable tolerances.

Table 4: U.S. Customary and Metric Cable Lengths and Tolerances

	U.S. Customary		Metric	
PART Variation	Length	Tolerance	Length	Tolerance
AA	not used		0.01 m	±2.0 mm
AB	not used		0.02 m	±2.0 mm
AC	not used		0.03 m	±2.0 mm
AD	not used		0.04 m	±2.0 mm
AE	not used		0.05 m	±2.0 mm
AF	not used		0.06 m	±2.0 mm
AH	not used		0.07 m	±2.0 mm
AJ	not used		0.08 m	±2.0 mm
AK	not used		0.09 m	±2.0 mm
0A	1 in.	±0.5 in.	0.1 m	±16 mm
0B	2 in.	±0.5 in.	0.2 m	±16 mm
0C	3 in.	±0.5 in.	0.3 m	±16 mm
0D	4 in.	±0.5 in.	0.4 m	±16 mm
0E	5 in.	±0.5 in.	0.5 m	±16 mm
0F	6 in.	±0.5 in.	0.6 m	±16 mm
0M	7 in.	±0.5 in.	0.7 m	±16 mm
0J	8 in.	±0.5 in.	0.8 m	±16 mm
0K	9 in.	±0.5 in.	0.9 m	±16 mm
0L	10 in.	±0.5 in.	not used	—
0M	11 in.	±0.5 in.	not used	—
01	12 in. (1 ft., 0 in.)	±1.0 in.	1.0 m	±25 mm
1A	13 in. (1 ft., 1 in.)	±1.0 in.	1.1 m	±25 mm
1B	14 in. (1 ft., 2 in.)	±1.0 in.	1.2 m	±25 mm
1C	15 in. (1 ft., 3 in.)	±1.0 in.	1.3 m	±25 mm
1D	16 in. (1 ft., 4 in.)	±1.0 in.	1.4 m	±25 mm
1E	17 in. (1 ft., 5 in.)	±1.0 in.	1.5 m	±25 mm
1F	18 in. (1 ft., 6 in.)	±1.0 in.	1.6 m	±25 mm
1H	19 in. (1 ft., 7 in.)	±1.0 in.	1.7 m	±25 mm
1J	20 in. (1 ft., 8 in.)	±1.0 in.	1.8 m	±25 mm
1K	21 in. (1 ft., 9 in.)	±1.0 in.	1.9 m	±25 mm
1L	22 in. (1 ft., 10 in.)	±1.0 in.	not used	—
1M	23 in. (1 ft., 11 in.)	±1.0 in.	not used	—
02	24 in. (2 ft., 0 in.)	±1.0 in.	2.0 m	±25 mm
2A	25 in. (2 ft., 1 in.)	±1.0 in.	2.1 m	±25 mm
2B	26 in. (2 ft., 2 in.)	±1.0 in.	2.2 m	±25 mm
2C	27 in. (2 ft., 3 in.)	±1.0 in.	2.3 m	±25 mm
2D	28 in. (2 ft., 4 in.)	±1.0 in.	2.4 m	±25 mm

Table 4 (Cont.): U.S. Customary and Metric Cable Lengths and Tolerances

	U.S. Customary		Metric	
PART Variation	Length	Tolerance	Length	Tolerance
2E	29 in. (2 ft., 5 in.)	±1.0 in.	2.5 m	±25 mm
2F	30 in. (2 ft., 6 in.)	±1.0 in.	2.6 m	±25 mm
2H	31 in. (2 ft., 7 in.)	±1.0 in.	2.7 m	±25 mm
2J	32 in. (2 ft., 8 in.)	±1.0 in.	2.8 m	±25 mm
2K	33 in. (2 ft., 9 in.)	±1.0 in.	2.9 m	±25 mm
2L	34 in. (2 ft., 10 in.)	±1.0 in.	not used	—
2M	35 in. (2 ft., 11 in.)	±1.0 in.	not used	—
03	36 in. (3 ft., 0 in.)	±1.0.	3.0 m	±25 mm
3A	37 in. (3 ft., 1 in.)	±1.0.	3.1 m	±25 mm
3B	38 in. (3 ft., 2 in.)	±1.0.	3.2 m	±25 mm
3C	39 in. (3 ft., 3 in.)	±1.0.	3.3 m	±25 mm
3D	40 in. (3 ft., 4 in.)	±1.0.	3.4 m	±25 mm
3E	41 in. (3 ft., 5 in.)	±1.0.	3.5 m	±25 mm
3F	42 in. (3 ft., 6 in.)	±1.0.	3.6 m	±25 mm
3H	43 in. (3 ft., 7 in.)	±1.0.	3.7 m	±25 mm
3J	44 in. (3 ft., 8 in.)	±1.0.	3.8 m	±25 mm
3K	45 in. (3 ft., 9 in.)	±1.0.	3.9 m	±25 mm
3L	46 in. (3 ft., 10 in.)	±1.0.	not used	—
3M	47 in. (3 ft., 11 in.)	±1.0.	not used	—
04	48 in. (4 ft. 0 in.)	±1.0.	4.0 m	±25 mm
4A	49 in. (4 ft. 1 in.)	±1.0.	4.1 m	±25 mm
4B	50 in. (4 ft. 2 in.)	±1.0.	4.2 m	±25 mm
4C	51 in. (4 ft. 3 in.)	±1.0.	4.3 m	±25 mm
4D	52 in. (4 ft. 4 in.)	±1.0.	4.4 m	±25 mm
4E	53 in. (4 ft. 5 in.)	±1.0.	4.5 m	±25 mm
4F	54 in. (4 ft. 6 in.)	±1.0.	4.6 m	±25 mm
4H	55 in. (4 ft. 7 in.)	±1.0.	4.7 m	±25 mm
4J	56 in. (4 ft. 8 in.)	±1.0.	4.8 m	±25 mm
4K	57 in. (4 ft. 9 in.)	±1.0.	4.9 m	±25 mm
4L	58 in. (4 ft. 10 in.)	±1.0.	not used	—
4M	59 in. (4 ft. 11 in.)	±1.0.	not used	—
05	60 in. (5 ft., 0 in.)	±2.0 in.	5.0 m	±100 mm
5A	61 in. (5 ft., 1 in.)	±2.0 in.	5.1 m	±100 mm
5B	62 in. (5 ft., 2 in.)	±2.0 in.	5.2 m	±100 mm
5C	63 in. (5 ft., 3 in.)	±2.0 in.	5.3 m	±100 mm
5D	64 in. (5 ft., 4 in.)	±2.0 in.	5.4 m	±100 mm
5E	65 in. (5 ft., 5 in.)	±2.0 in.	5.5 m	±100 mm

Table 4 (Cont.): U.S. Customary and Metric Cable Lengths and Tolerances

	U.S. Customary		Metric	
PART Variation	Length	Tolerance	Length	Tolerance
5F	66 in. (5 ft., 6 in.)	±2.0 in.	5.6 m	±100 mm
5H	67 in. (5 ft., 7 in.)	±2.0 in.	5.7 m	±100 mm
5J	68 in. (5 ft., 8 in.)	±2.0 in.	5.8 m	±100 mm
5K	69 in. (5 ft., 9 in.)	±2.0 in.	5.9 m	±100 mm
5L	70 in. (5 ft., 10 in.)	±2.0 in.	not used	—
5M	71 in. (5 ft., 11 in.)	±2.0 in.	not used	—
06	72 in. (6 ft., 0 in.)	±2.0 in.	6.0 m	±100 mm
6A	73 in. (6 ft., 1 in.)	±2.0 in.	6.1 m	±100 mm
6B	74 in. (6 ft., 2 in.)	±2.0 in.	6.2 m	±100 mm
6C	75 in. (6 ft., 3 in.)	±2.0 in.	6.3 m	±100 mm
6D	76 in. (6 ft., 4 in.)	±2.0 in.	6.4 m	±100 mm
6E	77 in. (6 ft., 5 in.)	±2.0 in.	6.5 m	±100 mm
6F	78 in. (6 ft., 6 in.)	±2.0 in.	6.6 m	±100 mm
6H	79 in. (6 ft., 7 in.)	±2.0 in.	6.7 m	±100 mm
6J	80 in. (6 ft., 8 in.)	±2.0 in.	6.8 m	±100 mm
6K	81 in. (6 ft., 9 in.)	±2.0 in.	6.9 m	±100 mm
6L	82 in. (6 ft., 10 in.)	±2.0 in.	not used	—
6M	83 in. (6 ft., 11 in.)	±2.0 in.	not used	—
07	84 in. (7ft., 0 in.)	±2.0 in.	7.0 m	±100 mm
7A	85 in. (7ft., 1 in.)	±2.0 in.	7.1 m	±100 mm
7B	86 in. (7ft., 2 in.)	±2.0 in.	7.2 m	±100 mm
7C	87 in. (7ft., 3 in.)	±2.0 in.	7.3 m	±100 mm
7D	88 in. (7ft., 4 in.)	±2.0 in.	7.4 m	±100 mm
7E	89 in. (7ft., 5 in.)	±2.0 in.	7.5 m	±100 mm
7F	90 in. (7ft., 6 in.)	±2.0 in.	7.6 m	±100 mm
7H	91 in. (7ft., 7 in.)	±2.0 in.	7.7 m	±100 mm
7J	92 in. (7ft., 8 in.)	±2.0 in.	7.8 m	±100 mm
7K	93 in. (7ft., 9 in.)	±2.0 in.	7.9 m	±100 mm
7L	94 in. (7ft., 10 in.)	±2.0 in.	not used	—
7M	95 in. (7ft., 11 in.)	±2.0 in.	not used	—
08	96 in. (8ft., 0 in.)	±2.0 in.	8.0 m	±100 mm
8A	97 in. (8ft., 1 in.)	±2.0 in.	8.1 m	±100 mm
8B	98 in. (8ft., 2 in.)	±2.0 in.	8.2 m	±100 mm
8C	99 in. (8ft., 3 in.)	±2.0 in.	8.3 m	±100 mm
8D	100 in. (8ft., 4 in.)	±2.0 in.	8.4 m	±100 mm
8E	101 in. (8ft., 5 in.)	±2.0 in.	8.5 m	±100 mm
8F	102 in. (8ft., 6 in.)	±2.0 in.	8.6 m	±100 mm

Table 4 (Cont.): U.S. Customary and Metric Cable Lengths and Tolerances

	U.S. Customary		Metric	
PART Variation	Length	Tolerance	Length	Tolerance
8H	103 in. (8ft., 7 in.)	±2.0 in.	8.7 m	±100 mm
8J	104 in. (8ft., 8 in.)	±2.0 in.	8.8 m	±100 mm
8K	105 in. (8ft., 9 in.)	±2.0 in.	8.9 m	±100 mm
8L	106 in. (8ft., 10 in.)	±2.0 in.	not used	—
8M	107 in. (8ft., 11 in.)	± 2.0 in.	not used	—
09	108 in. (9 ft., 0 in.)	±2.0 in.	9.0 m	±100 mm
9A	109 in.(9 ft., 1 in.)	±2.0 in.	9.1 m	±100 mm
9B	110 in. (9 ft., 2 in.)	±2.0 in.	9.2 m	±100 mm
9C	111 in. (9 ft., 3 in.)	±2.0 in.	9.3 m	±100 mm
9D	112 in. (9 ft., 4 in.)	±2.0 in.	9.4 m	±100 mm
9E	113 in. (9 ft., 5 in.)	±2.0 in.	9.5 m	±100 mm
9F	114 in. (9 ft., 6 in.)	±2.0 in.	9.6 m	±100 mm
9H	115 in. (9 ft., 7 in.)	±2.0 in.	9.7 m	±100 mm
9J	116 in. (9 ft., 8 in.)	±2.0 in.	9.8 m	±100 mm
9K	117 in. (9 ft., 9 in.)	±2.0 in.	9.9 m	±100 mm
9L	118 in. (9 ft., 10 in.)	±2.0 in.	not used	—
9M	119 in. (9 ft., 11 in.)	±2.0 in.	not used	—
10	10 ft.	±3.0 in.	10 m	±2%
11	11 ft.	±3.0 in.	11 m	±2%
12	12 ft.	±3.0 in.	12 m	±2%
13	13 ft.	±3.0 in.	13 m	±2%
14	14 ft.	±3.0 in.	14 m	±2%
15	15 ft.	±3.0 in.	15 m	±2%
16	16 ft.	±3.0 in.	16 m	±2%
17	17 ft.	±3.0 in.	17 m	±2%
18	18 ft.	±3.0 in.	18 m	±2%
19	19 ft.	±3.0 in.	19 m	±2%
20	20 ft.	±3.0 in.	20 m	±2%
21	21 ft.	±3.0 in.	21 m	±2%
22	22 ft.	±3.0 in.	22 m	±2%
23	23 ft.	±3.0 in.	23 m	±2%
24	24 ft.	±3.0 in.	24 m	±2%
25	25 ft.	±3.0 in.	25 m	±2%
26	26 ft.	±2%	26 m	±2%
27	27 ft.	±2%	27 m	±2%
28	28 ft.	±2%	28 m	±2%

Table 4 (Cont.): U.S. Customary and Metric Cable Lengths and Tolerances

	U.S. Customary		Metric	
PART Variation	Length	Tolerance	Length	Tolerance
29	29 ft.	±2%	29 m	±2%
30	30 ft.	±2%	30 m	±2%
to				
40	40 ft.	±2%	40 m	±2%
to				
50	50 ft.	±2%	50 m	±2%
to				
60	60 ft.	±2%	60 m	±2%
to				
70	70 ft.	±2%	70 m	±2%
to				
80	80 ft.	±2%	80 m	±2%
to				
90	90 ft.	±2%	90 m	±2%
to				
99	99 ft.	±2%	99 m	±2%
A0	100 ft.	±2%	100 m	±2%
A1	110 ft.	±2%	110 m	±2%
A2	120 ft.	±2%	120 m	±2%
B0	200 ft.	±2%	200 m	±2%
to				
C0	300 ft.	±2%	300 m	±2%
to				
D0	400 ft.	±2%	400 m	±2%
to				
E0	500 ft.	±2%	500 m	±2%
to				
F0	600 ft.	±2%	600 m	±2%
to				
H0	700 ft.	±2%	700 m	±2%
to				
J0	800 ft.	±2%	800 m	±2%
to				
K0	900 ft.	±2%	900 m	±2%
to				
L0	1000 ft.	±2%	1000 m	±2%
to				
M0	1100 ft.	±2%	1100 m	±2%
to				

Table 4 (Cont.): U.S. Customary and Metric Cable Lengths and Tolerances

	U.S. Customary		Metric	
PART Variation	Length	Tolerance	Length	Tolerance
N0	1200 ft.	±2%	1200 m	±2%
to				
P0	1300 ft.	±2%	1300 m	±2%
to				
R0	1400 ft.	±2%	1400 m	±2%
to				
S0	1500 ft.	±2%	1500 m	±2%
to				
T0	1600 ft.	±2%	1600 m	±2%
to				
U0	1700 ft.	±2%	1700 m	±2%
to				
V0	1800 ft.	±2%	1800 m	±2%
to				
W0	1900 ft.	±2%	1900 m	±2%
to				
Y0	2000 ft.	±2%	2000 m	±2%
to				
Z0	2100 ft.	±2%	2100 m	±2%
to				
Z9	2190 ft.	±2%	2190 m	±2%

APPENDIX A REFERENCED DOCUMENTS

A.1 EL-Class Digital Documents

EL-Class Number	Document Title
EL-00012-00	*DEC STD 012-0 Part Identification Standard*
EL-00022-01	*DEC STD 022-1 Cable and Harness Documentation: Drawing Requirements for 70-Class and Option Numbers*

Use VTX SMC to order copies of EL-class documents from Standards and Methods Control. Send distribution questions to JOKUR::SMC or call DTN: 234-4423.

```
+-------------------------------------------------------------------+
|                        READER COMMENTS                            |
|                                                                   |
| Your  comments  and suggestions  will help  Standards and Methods |
| Control improve their services and documents.                     |
+-------------------------------------------------------------------+
```

Did you request this document? _____ If so, did it arrive within a satisfactory period of time? _____ Please comment.

What are your impressions of this document? Consider format, organization, completeness, readability, and illustrations.

————————————**FOLD ON THIS LINE**———————————————————————— -

Did you find technical or clerical errors in this document? If so, please specify the page number(s) and the error(s).

Are the instructions for the update package clear? _____
Was an index available? _____ If not, is one needed? _____
Do you have other suggestions for improving this document?

The following information is optional:

Name _____ Mailstop _____

Department _____ Node _____

Send your comments to JOKUR::PROJECTS, or fold, staple, and send this page through interoffice mail to:

```
+------------------------------+
|       READERS' COMMENTS      |
| STANDARDS AND METHODS CONTROL |
|          NRO4/D4             |
+------------------------------+
```